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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,255	01/22/2002	Shosei Kawashima	MAT-8164US 6470	
75	90 05/17/2006		EXAMINER	
Lawrence E. Ashery			BELLO, AGUSTIN	
Ratner & Presti	a			
PO Box 980		ART UNIT	PAPER NUMBER	
Suite 301 One Westlake Berwyn			2613	
Valley Forge, F	PA 19482-0980			

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)			
		09/937,255	KAWASHIMA ET AL.			
Office Action Su	mmary	Examiner	Art Unit	_		
		Agustin Bello	2613			
The MAILING DATE of t Period for Reply	his communication app	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY THE MAILING DATE OF THIS - Extensions of time may be available und after SIX (6) MONTHS from the mailing - If the period for reply specified above is - If NO period for reply is specified above, - Failure to reply within the set or extende	or the provisions of 37 CFR 1.13 date of this communication. ess than thirty (30) days, a reply the maximum statutory period will be statute, in three months after the mailing in three months after the mailing.	IS SET TO EXPIRE 3 MONTH(36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE date of this communication, even if timely filed	nely filed s will be considered timely. the mailing date of this communicati D (35 U.S.C. § 133).	ion.		
Status						
1) Responsive to communi	cation(s) filed on 15 Fe	ebruary 2006				
2a) ☐ This action is FINAL .		action is non-final.				
3) Since this application is	,					
Disposition of Claims						
4)) is/are withdrav owed. cted. ijected to.					
Application Papers						
Applicant may not request Replacement drawing shee	is/are: a) accertant any objection to the objection to the objection to the objection to the objection including the correction	r. epted or b)□ objected to by the E drawing(s) be held in abeyance. See on is required if the drawing(s) is obj aminer. Note the attached Office	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121			
Priority under 35 U.S.C. § 119						
a) All b) Some * c) 1. Certified copies of 2. Certified copies of 3. Copies of the certi application from the	None of: the priority documents the priority documents fied copies of the prior the International Bureau	s have been received in Application ity documents have been received	on No ed in this National Stage			
Attachment(s)						
 Notice of References Cited (PTO-89 Notice of Draftsperson's Patent Drav Information Disclosure Statement(s) Paper No(s)/Mail Date 9/24/01. 	ving Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:				

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young (U.S. Patent No. 6,567,011) in view of Davies (U.S. Patent No. 4,246,611).

Regarding claims 1, 5, 9, and 10 Young teaches a plurality of keys closing switch contacts (reference numeral SXX in Figure 15B) corresponding thereto when pressed down; a microcomputer (reference numeral U1 in Figure 15B) coupled to said keys for generating a remote-control signal in response to pressing each of said keys; and a transmission circuit (reference numeral IR1 in Figure 15A) coupled to said microcomputer for transmitting a remote-control signal, wherein the microcomputer is operable to: be shifted to a test mode when a specific key of said keys is pressed (e.g. "Mode <<Magic>>" of column 9 lines 9-23); store (via ROM in U1 of Figure 15B and described in column 12 lines 65-67) an indication of which of said contacts are detected as closed after the test mode is initiated (e.g. storing "4-4-3" of column 9 lines 9-23), said contacts indicated as closed responsive to respective depressions of said keys; and transfer the indication of said contacts detected as closed and said contacts detected as not closed said transmission circuit (e.g. blinking LED of column 9 lines 9-23). Young differs from the claimed invention in that Young fails to specifically teach storing indications of which of

said contacts are detected as not closed. Davies, in the same field of remote controls, teaches that it is well known in the art to store indications of which of said contacts are detected as not closed (column 4 line 27 – column 5 line 16; e.g. bit shift register is initiated with 0's via the serial input shown in Figure 2, then a pulse for the depressed key is saved into the register). Furthermore, Young suggests storing indications of which of said contacts are detected as not closed via the disclosure of RAM within the microprocessor and the ability to determine whether or not a correct key sequence is followed in the "Mode << Magic>>." Moreover, one skilled in the art would have been motivated to store indications of which of said contacts are detected as not closed in order to have a complete account of which keys have been depressed and which have not. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to store indications of which of said contacts are detected as not closed as suggested by Young and taught by Davies.

Regarding claims 2, 4, 6, and 8, Young teaches that said transmission circuit transmits the signal as one of an infrared ray signal (via IR1 in Figure 15A) and a radio signal.

Regarding claims 3 and 7, Young teaches that the remote-control test signal additionally carries an identification signal of said microcomputer (e.g. "unique IR data output" of column 8 lines 52-65).

Regarding claim 11, Young teaches that transfer of said indications is delayed until after more than one of said indications of closing of said contacts has been stored (e.g. 0.5 second delays of column 9 lines 9-23; e.g. storing 4-4-3, the upon release of key "1" in column 9 lines 9-23).

3. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Young (U.S. Patent No. 6,567,011) in view of Davies (U.S. Patent No. 4,246,611) and Duffield (U.S. Patent No. 5,451,953).

Regarding claim 12, the combination of Young and Davies differs from the claimed invention in that it fails to specifically teach that one of said keys is detected as not closed despite being depressed. However, as noted by Duffield, this feature is very common in typical keyboard scanning software (column 2 lines 42-57). One skilled in the art would have been motivated to include such a feature in the combined device of Young and Davies in order to avoid ambiguity between reading of keys pressed simultaneously. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to include as a feature in the combination of Young and Davies the ability to detect one of said keys as not closed despite being depressed.

Response to Arguments

4. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Agustin Bello whose telephone number is (571) 272-3026. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AGUSTIN BELLO PRIMARY EXAMINER